

1 26. A transceiver according to claim 25, wherein the barrier material is a substance from the set
2 consisting of silicon oxide and silicon nitride.

1 27. A transceiver according to claim 25, wherein the barrier material is a substance from the set
2 consisting of polyethylene and polyvinylidenechloride (PVDC).

1 4. 28. A transceiver according to claim 25, wherein the barrier material has a thickness of 400 to 10,000
2 angstroms.

1 5. 29. A transceiver according to claim 25, wherein both sides of at least one of the two covers have a
2 coating of a barrier material which is a barrier to water vapor.

1 6. 30. A transceiver according to claim 29, wherein the barrier material on said both sides has a thickness
2 of 100 to 400 angstroms.

1 31. A radio frequency identification (RFID) transceiver, comprising:
2 first and second covers, wherein
3 at least one of the two covers includes an inner layer and an outer layer,
4 the inner layer is a sheet of dielectric film, and
5 the outer layer is a material which is electrically conductive and is a barrier to water
6 vapor;
7 a battery mounted between the two covers; and
8 an RFID transceiver circuit mounted between the two covers, wherein the transceiver circuit
9 includes antenna coupling circuitry for capacitively coupling the transceiver circuit to the electrically
10 conductive outer layer through the dielectric film so that the electrically conductive outer layer functions
11 as an antenna for the transceiver circuit.

1 32. A radio frequency identification (RFID) transceiver, comprising:
2 first and second covers, wherein
3 at least one of the two covers includes an inner layer and an outer layer,
4 the inner layer is a sheet of dielectric film, and
5 the outer layer is electrically conductive; and
6 an RFID transceiver circuit mounted between the two covers, wherein the transceiver circuit
7 includes antenna coupling circuitry for capacitively coupling the transceiver circuit to the electrically
8 conductive outer layer through the dielectric film so that the electrically conductive outer layer functions

9 as an antenna for the transceiver circuit.

1 33. A method of coupling an antenna to a radio frequency identification (RFID) transceiver,
2 comprising the steps of:

3 providing a first cover;

4 forming a second cover of an inner layer of dielectric film and an outer layer of a material
5 which is electrically conductive and is a barrier to water vapor;

6 mounting a battery between the two covers;

7 mounting an RFID transceiver circuit between the two covers; and

8 capacitively coupling the transceiver circuit to the electrically conductive outer layer through the
9 dielectric film so that the electrically conductive outer layer functions as an antenna for the transceiver
10 circuit.

1 34. A method of coupling an antenna to a radio frequency identification (RFID) transceiver,
2 comprising the steps of:

3 providing a first cover;

4 forming a second cover of an inner layer of dielectric film and an outer layer of a material
5 which is electrically conductive;

6 mounting an RFID transceiver circuit between the two covers; and

7 capacitively coupling the transceiver circuit to the electrically conductive outer layer through the
8 dielectric film so that the electrically conductive outer layer functions as an antenna for the transceiver
9 circuit.

1 35. A method of manufacturing and storing a plurality of miniature radio frequency identification
2 (RFID) transceivers, comprising the steps of:

3 mounting a plurality of RFID transceivers on a flexible sheet;

4 placing the sheet within an RF shielded dispensing enclosure which prevents RF signals
5 outside the enclosure from being received by the transceivers within the enclosure; and

6 providing an opening in the enclosure through which selected ones of the transceivers can be
7 removed while maintaining the RF shielding of any transceivers which are not removed.

1 36. A method according to claim 35, wherein the mounting step includes detachably mounting the
2 transceivers to an electrically conductive sheet, so that the conductive sheet provides some RF
3 shielding for each transceiver that is mounted on the conductive sheet.

1 37. A method according to claim 35, wherein the placing step further includes rolling up the sheet and
2 placing the rolled up sheet within the RF shielded dispensing enclosure.

1 38. Apparatus for storing and dispensing a plurality of miniature radio frequency identification (RFID)
2 transceivers, comprising:

3 a plurality of RFID transceivers mounted on a flexible sheet; and
4 a dispenser enclosing the sheet, the dispenser having RF shielding to prevent RF signals
5 outside the dispenser from being received by transceivers within the enclosure, and the dispenser
6 having an opening through which selected ones of the transceivers can be removed while maintaining
7 the RF shielding of any transceivers which are not removed.

1 39. Apparatus according to claim 38, wherein the flexible sheet is electrically conductive and the
2 transceivers are mounted to the sheet detachably, so that the flexible sheet provides some RF shielding
3 for each transceiver that is mounted on the flexible sheet.

1 40. A method of manufacturing a plurality of radio frequency identification (RFID) transceivers,
2 comprising the steps of:

3 unrolling from roll stock first and second sheets of polymer film;
4 mounting a plurality of RFID transceivers at spaced intervals between the two sheets;
5 after each transceiver is mounted, sealing the two sheets together along a contour encircling that
6 transceiver; and
7 rolling up the sealed-together sheets.

1 41. A method of manufacturing a radio frequency identification (RFID) transceiver, comprising the
2 steps of:

3 providing a sheet of polymer film having first and second halves separated by a boundary;
4 mounting an RFID transceiver on the first half of the sheet; and
5 folding the sheet in half along the boundary so that the first half of the sheet overlies the second
6 half of the sheet with the transceiver between the two halves; and
7 sealing together the first and second halves of the sheet along a contour which encircles the
8 RFID transceiver.

1 42. A method of manufacturing a radio frequency identification (RFID) transceiver, comprising the
2 steps of:

3 providing two covers, each cover being composed of a sheet of polymer film;